

EF-B INTEROPERABLE VAV DIFFUSER

ADDRESSING

Models: EF-B BACnet Interoperable Square VAV Diffuser

MAC ADDRESS

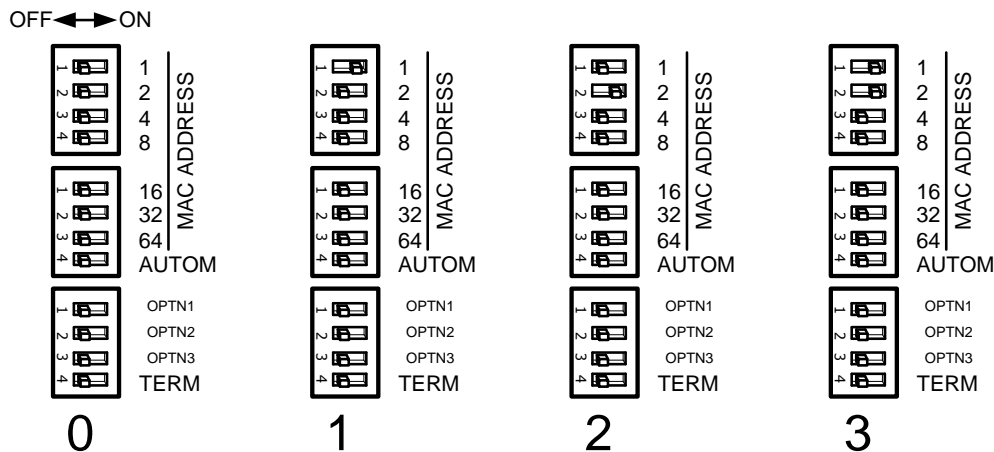
The MAC Address must be unique per device on each segment of the network. Unlike the Instance Number, the MAC Address does not need to be unique over the whole network. The same MAC Address may be used on different segments of the network.

To set the MAC Address use the dip switches labeled 1 through 64. Start with 1 and build a binary number between 0 and 127. Power must be cycled for the change to take effect.

For example to set the MAC Address to 6:

1. Set all the dip switches to the 'off' position
2. Convert decimal number 6 to a binary number (see chart attached) 6 = 0000110
Reading the binary number from right to left corresponds to the dip switches from 1 to 64
3. Adjust 1 to 'off'
4. Adjust 2 to 'on'
5. Adjust 4 to 'on'
6. Adjust 8 to 'off'
7. Adjust 16 to 'off'
8. Adjust 32 to 'off'
9. Adjust 64 to 'off'

Examples of MAC Addresses from 0 to 3 are shown below.



EF-B INTEROPERABLE VAV DIFFUSER ADDRESSING

INSTANCE NUMBER

The Instance Number must be unique per device across the whole network. Instance Numbers may not be repeated anywhere in the network.

To adjust the Instance Number, discover the diffuser using BACnet software and use the *object_identifier* object in the Device Properties of the diffuser. A number between 0 and 4,194,303 may be entered. If the Instance Number is changed then the device will need to be re-Discovered under the new number.

DEVICE PROPERTIES

Last updated: <date>

MAC: 10

object_identifier: device (1234) <----- Instance Number

vendor_identifier: 576

application_software_version: 11.8.2012.041234

firmware_revision: 0.8.8

max_adpu_length_accepted: 50

model_name: EF-B-HC

number_of_adpu_retries: 3

object_name: THERMA-FUSER DIFFUSER

protocol_object_types_supported: analog_input(1), etc...

protocol_services_supported: acknowledge Alarm(0), etc...

protocol_version: 1

segmentation_supported: 3

system_status: non_operational (0x4)

vendor_name: Acutherm

protocol_revision: 9

database_revision: 1

**EF-B INTEROPERABLE VAV DIFFUSER
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FORM 091.203 REV 1403

(Supersedes FORM 091.203 REV 1303)

DECIMAL / BINARY / HEXIDECIMAL CONVERSIONS

| Decimal | Binary | Hex |
|---------|---------|-----|
| 0 | 000000 | 00 |
| 1 | 000001 | 01 |
| 2 | 000010 | 02 |
| 3 | 000011 | 03 |
| 4 | 000100 | 04 |
| 5 | 000101 | 05 |
| 6 | 000110 | 06 |
| 7 | 000111 | 07 |
| 8 | 001000 | 08 |
| 9 | 001001 | 09 |
| 10 | 001010 | 0A |
| 11 | 001011 | 0B |
| 12 | 001100 | 0C |
| 13 | 001101 | 0D |
| 14 | 001110 | 0E |
| 15 | 001111 | 0F |
| 16 | 0010000 | 10 |
| 17 | 0010001 | 11 |
| 18 | 0010010 | 12 |
| 19 | 0010011 | 13 |
| 20 | 0010100 | 14 |
| 21 | 0010101 | 15 |
| 22 | 0010110 | 16 |
| 23 | 0010111 | 17 |
| 24 | 0011000 | 18 |
| 25 | 0011001 | 19 |
| 26 | 0011010 | 1A |
| 27 | 0011011 | 1B |
| 28 | 0011100 | 1C |
| 29 | 0011101 | 1D |
| 30 | 0011110 | 1E |
| 31 | 0011111 | 1F |
| 32 | 0100000 | 20 |
| 33 | 0100001 | 21 |
| 34 | 0100010 | 22 |
| 35 | 0100011 | 23 |
| 36 | 0100100 | 24 |
| 37 | 0100101 | 25 |
| 38 | 0100110 | 26 |
| 39 | 0100111 | 27 |
| 40 | 0101000 | 28 |
| 41 | 0101001 | 29 |
| 42 | 0101010 | 2A |

| Decimal | Binary | Hex |
|---------|---------|-----|
| 43 | 0101011 | 2B |
| 44 | 0101100 | 2C |
| 45 | 0101101 | 2D |
| 46 | 0101110 | 2E |
| 47 | 0101111 | 2F |
| 48 | 0110000 | 30 |
| 49 | 0110001 | 31 |
| 50 | 0110010 | 32 |
| 51 | 0110011 | 33 |
| 52 | 0110100 | 34 |
| 53 | 0110101 | 35 |
| 54 | 0110110 | 36 |
| 55 | 0110111 | 37 |
| 56 | 0111000 | 38 |
| 57 | 0111001 | 39 |
| 58 | 0111010 | 3A |
| 59 | 0111011 | 3B |
| 60 | 0111100 | 3C |
| 61 | 0111101 | 3D |
| 62 | 0111110 | 3E |
| 63 | 0111111 | 3F |
| 64 | 1000000 | 40 |
| 65 | 1000001 | 41 |
| 66 | 1000010 | 42 |
| 67 | 1000011 | 43 |
| 68 | 1000100 | 44 |
| 69 | 1000101 | 45 |
| 70 | 1000110 | 46 |
| 71 | 1000111 | 47 |
| 72 | 1001000 | 48 |
| 73 | 1001001 | 49 |
| 74 | 1001010 | 4A |
| 75 | 1001011 | 4B |
| 76 | 1001100 | 4C |
| 77 | 1001101 | 4D |
| 78 | 1001110 | 4E |
| 79 | 1001111 | 4F |
| 80 | 1010000 | 50 |
| 81 | 1010001 | 51 |
| 82 | 1010010 | 52 |
| 83 | 1010011 | 53 |
| 84 | 1010100 | 54 |
| 85 | 1010101 | 55 |

| Decimal | Binary | Hex |
|---------|---------|-----|
| 86 | 1010110 | 56 |
| 87 | 1010111 | 57 |
| 88 | 1011000 | 58 |
| 89 | 1011001 | 59 |
| 90 | 1011010 | 5A |
| 91 | 1011011 | 5B |
| 92 | 1011100 | 5C |
| 93 | 1011101 | 5D |
| 94 | 1011110 | 5E |
| 95 | 1011111 | 5F |
| 96 | 1100000 | 60 |
| 97 | 1100001 | 61 |
| 98 | 1100010 | 62 |
| 99 | 1100011 | 63 |
| 100 | 1100100 | 64 |
| 101 | 1100101 | 65 |
| 102 | 1100110 | 66 |
| 103 | 1100111 | 67 |
| 104 | 1101000 | 68 |
| 105 | 1101001 | 69 |
| 106 | 1101010 | 6A |
| 107 | 1101011 | 6B |
| 108 | 1101100 | 6C |
| 109 | 1101101 | 6D |
| 110 | 1101110 | 6E |
| 111 | 1101111 | 6F |
| 112 | 1110000 | 70 |
| 113 | 1110001 | 71 |
| 114 | 1110010 | 72 |
| 115 | 1110011 | 73 |
| 116 | 1110100 | 74 |
| 117 | 1110101 | 75 |
| 118 | 1110110 | 76 |
| 119 | 1110111 | 77 |
| 120 | 1111000 | 78 |
| 121 | 1111001 | 79 |
| 122 | 1111010 | 7A |
| 123 | 1111011 | 7B |
| 124 | 1111100 | 7C |
| 125 | 1111101 | 7D |
| 126 | 1111110 | 7E |
| 127 | 1111111 | 7F |

